

Listing of Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (previously presented) A method of soldering an item to be soldered in a transit oven comprising:

heating the item to be soldered in a preheating zone using a preheating device to a first temperature below the melting temperature of a solder in contact with the item to be soldered;

subjecting the item to be soldered in a soldering zone with a first volume flow of a fluid with a second temperature higher than a melting temperature of the solder generated by a convection heater;

after subjecting the item to be soldered with the first volume flow, subjecting the item to be soldered in the soldering zone with a second volume flow of a fluid with the second temperature, and

cooling the item to be soldered below the melting temperature,

wherein the first volume flow is larger than the second volume flow, and

wherein the convection heater heats the item to be soldered from both sides with the first and second volume flows at the second temperature.

2. (Cancelled)

3. (previously presented) The method according to Claim 1, wherein the soldering zone comprises a first section for providing the first volume flow and a second section for providing the second volume flow.

4. (previously presented) The method according to Claim 1, wherein at least one of the first and second volume flows is statically reduced.

5. (previously presented) The method according to Claim 3, wherein part of the first volume flow is branched off before entering the soldering zone in order to produce the second volume flow from the remaining portion of the first volume flow.

6. (previously presented) The method according to Claim 5, wherein the branched off part of the first volume flow is used for preheating a further item to be soldered.

7. (previously presented) The method according to Claim 1, further comprising:

setting a maximum temperature of the item to be soldered; and

adjusting the second temperature of the second volume flow to substantially the set maximum temperature.

8. (previously presented) The method according to Claim 7, wherein the second temperature is set to the maximum temperature.

9. (previously presented) The method according to Claim 3, wherein at least a first convection heating unit of the convection heater is provided in a first soldering zone and at least a second convection heating unit of the convection heater is provided in a second soldering zone.

10. (Cancelled)

11. (previously presented) The method according to Claim 1, wherein the first volume flow is reduced based on a measurement of the item to be soldered.

12-20 (Cancelled)